

## RESPONSE TO COMMENTS

Date: February 26, 2002

REGARDING UNDERGROUND INJECTION CONTROL (UIC) DRAFT PERMIT #MI-163-1I-0001 ISSUED TO THE SUN PIPE LINE COMPANY (SPL) FOR WASTE INJECTION WELL #1A IN WAYNE COUNTY, MICHIGAN FOR THE PURPOSE OF DISPOSAL OF LIQUID INDUSTRIAL WASTE.

### **Introduction**

This response is issued in accordance with Section 124.17 of Title 40 of the Code of Federal Regulations (40 C.F.R. § 124.17), which requires that at the time any final United States Environmental Protection Agency (EPA) permit decision is issued, the EPA shall: (1) describe and respond to all significant comments raised during the public comment period, (2) specify which provisions, if any, of the draft decision have been changed and the reasons for the change, (3) include in the administrative record any documents cited in the response to comments, and (4) make the response to comments available to the public.

### **Background**

The public comment period for this permitting decision began on April 26, 2001, with public notices sent to interested parties who had contacted the EPA, Region 5, UIC Branch.

### **Determination**

The EPA has determined that public comments submitted raised significant issues which have now been investigated. The results of these investigations show that the EPA's basis for determining that it is appropriate to issue the SPL a permit to construct and operate the injection well is valid. During the public comment period the UIC Branch learned that SPL plans to construct other wells for extraction of the brine injected by Well 1A. As a result, the UIC Branch required SPL to commit to monitoring the fluid extracted from the well. SPL agreed to this requirement. We have modified Attachment F of the permit to include the requirement. Therefore, the EPA has issued a final permit to the SPL on the date shown at the top of this document.

1. **Comment:** The public notice did not adequately locate the sites of proposed wells and the maps in the newspapers were so small that they were unreadable.

**Response:** We recognized that readers might not realize the proximity of the site of the proposed wells to their own properties based on the township-range description, so we provided a map. While the maps published in the early newspapers releases were reduced in size, the maps in the public notices we mailed out clearly indicated the locations of the SPL well in relation to major streets. Later newspaper notices and advertisements did provide adequate definition of the location.

2. **Comment:** The public hearings should provide an opportunity for comment on the effects of

2. **Comment:** The public hearings should provide an opportunity for comment on the effects of activities which will occur at the surface and which might affect the quality of life of those in the vicinity of the wells.

**Response:** This permit does not excuse compliance with requirements that might govern above-ground activities, including but not limited to any applicable permitting, zoning and/or manifesting requirements. 40 C.F.R. § 146.14 sets forth the information EPA must consider in authorizing Class I wells. Consistent with the Safe Drinking Water Act (SDWA), these requirements focus on the impact of the injection upon underground sources of drinking water. This comment did not reference any above-ground activities that would impact underground sources of drinking water. While we listened to comments concerning above-ground activities, this permitting decision is based on the SDWA and its implementing regulations.

3. **Comment:** A comment was submitted after the comment period asking EPA to ensure that it is complying with the requirements of the National Environmental Policy Act (NEPA).

**Response:** As set forth at 40 C.F.R. §124.9(b)(6), UIC permits are not subject to the environmental impact statement provisions of Section 102(2)(C) of NEPA. Notwithstanding NEPA's general application to major federal actions, courts have recognized that NEPA's primary goal is to require government to consider the environmental consequences of its decision. The UIC permitting process functionally complies with NEPA.

4. **Comment:** Were the community's elected officials notified about the permit application and, if so, what have they done to oppose the permit?

**Response:** Elected officials were notified if they were on the UIC Branch's list of interested parties. Those listed receive the same notification as everyone else on the list. Several elected officials have attended public meetings and submitted comments opposing the location of a hazardous waste management facility in Romulus. Our permit decision is based on the requirements of the Statute and regulations.

5. **Comment:** Concerns were expressed about the apparent miscommunication between the people of the Romulus area and the EPA. Congressmen have asked the EPA's Administrator Christine Whitman to have a hearing personally in Romulus. The Congressmen's offices have yet to hear from Governor Whitman.

**Response:** A letter from two Congressmen dated June 15, 2001 requested Administrator

Whitman to personally visit the location where Environmental Disposal Systems, Inc. (EDS) is proposing a hazardous waste storage well. The Administrator responded by letter to the Congressmen on August 17th saying that the Regional Administrator for the Great Lakes Region, Thomas Skinner, would meet with local residents in the near future. On October 4, 2001, the Regional Administrator met with local residents in Romulus.

6. **Comment:** Wells were drilled around the airport in the 1930's in the search for oil.

**Response:** The Michigan Department of Environmental Quality (MDEQ) has kept records of all wells drilled for oil and gas in the state since about 1931 when oil and gas regulations were established. Through the years they have looked for records of older wells among other records. As a result, we believe the MDEQ records of wells drilled in the 1930's to be complete. These records indicate that no wells were drilled in the area during that time period. Wells were drilled in the mid 1950's near the airport. These wells were drilled through the Niagaran Series less than 2,400 feet in depth. Wells of this depth pose no threat because there is no means to get any contaminants from the injection interval below 3,900 feet to wells which are no deeper than 2,400 feet. It is unlikely that unrecorded wells went any deeper because oil has never been found in deeper zones in the region. Most wells near the airport are beyond the two-mile area of review (AOR) for the SPL injection well.

7. **Comment:** The EDS wells should be considered in the SPL area of review (AOR).

**Response:** We have considered the EDS wells as being within the AOR. Corrective action is required at 40 C.F.R. § 144.55(a) for wells within the AOR which are improperly sealed, completed, or abandoned. The EDS wells will be built to standards approved by the EPA to ensure that they cannot become conduits for the movement of fluids out of the injection zone and into underground sources of drinking water (USDWs). If used, those wells will be tested periodically during the period of their use to be sure that there is no movement outside the casings. When they are no longer used, they will be plugged completely with cement through a means approved by the EPA. Because the wells will be properly sealed, completed, and eventually plugged, no corrective action is required.

8. **Comment:** What kind of reactions will take place if the fluids injected through the SPL well mix with the fluids injected through the EDS wells?

**Response:** The fluid which SPL will inject will be similar to the natural brines which fill the pores in the Eau Claire and Mt. Simon Sandstones. There may be reactions

which result in the deposition of tiny crystals of various salts. This type of reaction can reduce the permeability of pores in which such reactions occur, but they will have no significant effect on the operations.

9. **Comment:** The amount of water to be used is excessive.

**Response:** This has nothing to do with the injection operation. The amount of water required is a result of the dissolving salt. If Sun is going to increase the size of its cavern storage they can either dissolve the salt with fresh water or mine it out. Mining it out will take years and result in numerous large shafts which can be difficult to seal. Dissolving salt requires a certain amount of water. It is a very small amount relative to the amount of water available from the public water supply. Disposal of the resulting brine through any method other than preparation of salt for sale which would require construction of a plant which would be abandoned in a few years has important environmental consequences.

10. **Comment:** One commentor indicated that there is a length of tubing protruding from the ground in her yard.

**Response:** EPA asked its own contract inspectors and SPL to investigate this tubing. Both groups visited the house and confirmed the existence of a 3 « inch tubing with a thread protector in the yard. A neighbor said that the tubing is from an old water well. The location of the tubing does not match that of any known well. This size tubing is rarely used in constructing oil wells because it is unsuitable as a casing or tubing for pumping wells. It is a typical size for water wells. We are confident that it is not part of a deep well and we believe it is probably an abandoned water well because of the type and condition of the casing as well as the quality of the MDEQ records.

11. **Comment:** The records in the state archives might tell of wells drilled in the area of review.

**Response:** Well records are developed, maintained, and preserved by the Geological Survey Division (GSD) of the Michigan DEQ. The GSD has searched for records which predate the permitting program which was started in 1931. The MDEQ's records are readily available, and both the applicant's consultants and the EPA have reviewed them in the search for wells which might serve as conduits for fluid movement. No such wells were found. It is unlikely that other state archives would include information not found in the GSD's files.

12. **Comment:** Concern was expressed that the SPL wells will be conduits for waste movement.

**Response:** This permit is issued only for the SPL injection well. It will be constructed and

operated in accordance with regulations found in 40 C.F.R. § 146.12 and 13 which were formulated to ensure that injection wells will not become conduits for the flow of fluids from the injection or any zone into USDWs. At five-year intervals tests will be run for the purpose of demonstrating that there is no movement of fluids along the well bore upward out of the injection zone or into USDWs from the injection zone and any other zone penetrated by the well.

As a result of information gained by the EPA during the public comment period, the EPA asked SPL to revise its waste analysis plan to include periodic scans of brine extracted through the proposed extraction well(s) in the event that EDS injects hazardous waste into the injection zone. SPL has agreed to this, and the waste analysis plan has been revised.

Any other wells which might be drilled deep enough to be potential conduits will be regulated by the MDEQ. These wells will also be regulated and evaluated to ensure that they will not become conduits.

13. **Comment:** Where will the waste go if the injection zone is already full of water? Will it go to the Great Lakes?

**Response:** No, waste will not move from the injection zone into the Great Lakes. The injection zone is already full of water. Although we may not think of water as being compressible, it has a measurable compressibility which is about  $3.2 \times 10^{-6}$  cubic feet per cubic foot / pound per square inch (cu. ft / cu. ft / psi). This means that if there is a cylinder with a piston to increase the pressure, then an increase by one psi in the pressure applied to the piston will decrease the volume of that part of the cylinder filled with water by a volume equal to 0.0000032 of the current volume of the water-filled cylinder. This is not much compressibility, but the volume of the Mt. Simon is extremely large. As a result, at some locations billions of gallons have been injected with little long-term pressure increase.

The waste brine itself will move outward in all directions from the injection well forming a plume which would be fairly cylindrical within the injection zone. If the natural brine in the injection zone is moving, the plume will be carried along with the formation water and will become more oval. In this area, the rate of natural ground water movement in the Mt. Simon is less than 6 inches per year, so the effect is insignificant during the life of the wells. After injection ends, the plume will continue to move both as a result of the movement of formation brine and as a result of any difference in density between the injected brine and the formation brine. This movement will be only a few thousand feet because of the similarity in densities between the injected brine and the natural brine. During all its movement the boundaries with the natural brine will become more blurred. Because of the compressibility described above, neither waste nor natural brine

will be forced through the injection zone to the surface.

14. **Comment:** Karst areas, where dissolution of limestone by carbonic acid has resulted in creation of caves, are unsuitable for injection.

**Response:** Even though the glacial drift in this area of Michigan may cover a karst area, the injection zone is a sandstone far below the karst features, which affect only 100 feet of the top of the bedrock in this area.

15. **Comment:** The injection below 3,900 feet is not particularly deep. Copper mines in Michigan's upper peninsula have been worked at depths of 2,600 feet. Concern was expressed about the effects of injecting at this depth because the injected material would seek to move in all directions.

**Response:** The depth of a mine in one location has little to do with the resistance to flow in another location. The movement of liquid tends to follow the bedding of the rocks which is nearly horizontal.

If the commentor is concerned that there may be a mine constructed to depths near to that of the injection interval, we are not aware of any mines of such depth in the area or minerals below the salt bearing formation, which is less than 2,000 feet deep.

16. **Comment:** The area will experience an upwelling of saltwater as a result of injection.

**Response:** The area will not experience an upwelling of saltwater as a result of injection. The regulations at 40 C.F.R. § 144.52(a)(3) require that permit limits prevent movement of fluids into USDWs. The requirements of 40 C.F.R. § 146.12(b) require that wells be constructed so as to prevent movement of fluids into or between USDWs. Therefore, SPL has proposed that injection will be far below the USDWs. The EPA has reviewed the construction proposed by SPL and the characteristics of the geological formations separating the injection zone from the USDWs. The EPA agrees that the proposed construction of the wells is such that waste will be injected into a formation from which it cannot move upward into USDWs.

The history of brine injection in this area supports our belief that an up welling will not occur in this particular location. When the original caverns were constructed by SPL the brine was injected into the Sylvania Sandstone, which lies between 400 and 600 feet below the surface. While that injection differs from SPL's current expansion plans because it occurred over a longer period, the

depth to the injection zone was approximately one tenth of the depth to which injection into the Mt. Simon and lower part of the overlying Eau Claire Sandstones is now planned. We have no information to indicate that any water wells were ruined or that any salt water leaked to the surface. There was no upwelling at that time because the Sylvania has very good reservoir properties which allowed the injected brine to flow laterally away from the wells because the overlying rocks are confining. We do not expect brine injected into a sandstone formation 3,500 feet below the Sylvania and separated from the Sylvania by layers of very dense rock to flow upward through the Sylvania, to the USDWs. The Sylvania has shown that it has the capacity to accept large volumes of injected water without enough pressure being induced to force water from the formation.

The evidence indicates that there are formations overlying the Mt. Simon which have much better confining properties than the rock overlying the Sylvania. The simulations of movement at this and other facilities, as well as actual measurements of physical effects indicate that the small upward movement resulting from injection in this area will be limited to less than a few tens of feet above the top of the injection zone.

17. **Comment:** Seismic testing of the cavern area and the area between the SPL and EDS sites should be conducted.

**Response:** Seismic testing can identify fractures if they cause substantial vertical offset of formations which have very different acoustical properties. Because there is little apparent change in the slope of any of the formations in the area, the amount of offset due to faulting would be small. Identifying fractures using seismic testing might be impossible.

In this area, faulting would probably be caused by tension. Tensional faults result in removal of parts of the geologic section where the fault cuts a well bore. The wells to be drilled are deep relative to the distance separating them so that any fracture affecting the area to the extent that it would cut the injection zone and the entire confining zone in the area between the wells is very likely to cut at least one of the wells. Therefore we can compare the geophysical logs of the wells and look for sections of rock which are present in one well but missing in the other at a point at which the fracture cuts the well bore. A fracture identification log will also be made through the entire injection and confining zones, from about 1,450 feet to 4,500 feet. This log consists of a continuous picture of the well bore made using a sonar technique. The picture will show many features of the formations such as bedding planes, formation boundaries and fractures. Examining these logs will be more effective than conducting seismic testing.

18. **Comment:** Concern was expressed about the effect of a lower water level in a small pond near the site of the wells on the rate of flow from the injection zone.

**Response:** The level of water in the pond does not reflect the pressure in any of the aquifers between the Earth's surface and the injection zone. Where the pond is only a few feet deep, the water level in wells penetrating the first bedrock aquifer lies about 40 feet below the surface at this location.

It is likely that the water accumulates in the pond because the soil into which the pond has been excavated has very low permeability, which slows down the infiltration of water.

19. **Comment:** Part of the formations overlying the injection zone consists of something called "salt crush". Its presence will accelerate the onset of problems.

**Response:** We were unable to find a definition of "salt crush". We expect the flow caused by injection pressure to be stopped by a few tens of feet of rock immediately above the injection zone. The make up of rock high above this in the vicinity of the salt-bearing formation will have no effect on the extent of fluid migration.

20. **Comment:** Concern was expressed that explosions at the SPL facility and the nearby Clark Oil Refinery a number of years ago might have damaged the confining formations.

**Response:** Because of the attenuating effects of soil and rock, explosions affect only very shallow geological materials. A past surface explosion could not have caused a fracture extending 3,900 feet to the top of the injection zone.

21. **Comment:** This is a dangerous area with a history of explosions.

**Response:** Explosions don't pose serious risks for injection wells. The wells will be constructed to withstand very high pressures. It is doubtful that any imaginable explosion would damage the well construction. Even if a vehicle hit the well head with sufficient force to sever it, the flow from the well would soon slow and

be controllable if the weight of the heavy brine alone would not be enough resistance to kill the well. The facility has a considerable capacity to store spilled liquid so that it is unlikely that there would be any loss.

22. **Comment:** The EPA allows and encourages trespassing because it is rare for injected wastes



to remain under the property on which they are originally injected.

**Response:** As set forth at 40 C.F.R. § 144.35(b) and (c), the issuance of this permit does not convey any property rights of any sort or any exclusive privilege and does not authorize any injury to person or property or invasion of other private rights, or any infringement of State or local law or regulations.

23. **Comment:** Concern was expressed about the possibility that SPL or a second party to whom SPL might transfer the well might convert the well for disposal of hazardous wastes.

**Response:** Transfers and modifications are covered under 40 C.F.R. §§ 144.38 , 144.39 and 144.41. Under 40 C.F.R. § 144.39(b)(3), a determination that the waste being injected is a hazardous waste as defined in 40 C.F.R. § 261.3 either because the definition has been revised, or because the previous determination has been changed is a cause to modify or, alternatively, revoke and reissue a permit. In the event that such a conversion is requested, the EPA will evaluate the proposal and will ensure that, whatever use is made of the well, the injection activities will not result in contamination of underground sources of drinking water. If hazardous waste were to be proposed for injection, other permits as well as a demonstration of no migration from the injection zone will be required.

24. **Comment:** Is the \$51,000 bond which was established to plug the well in the event of financial default by SPL sufficient to plug the well?

**Response:** The cost of plugging the well was estimated by an outside contractor hired by SPL to research the cost and report the result. The estimate will be updated when the wells are constructed and, if necessary, the bond amount will be increased. Based on reported costs to plug other wells and the relative simplicity of plugging this well, we believe that \$51,000 is adequate.

25. **Comment:** The EPA should not permit Class I wells because such wells adversely affect real estate property values.

**Response:** As set forth at 40 C.F.R. § 144.35(b) and (c), the issuance of this permit does not convey any property rights of any sort or any exclusive privilege and does not authorize any injury to person or property or invasion of other private rights, or any infringement of State or local law or regulations, including zoning laws. Our determination to issue this permit is based upon the Statute and regulations, which focus on the impact upon USDWs.

26. **Comment:** Concern was expressed about the effect of harmonics arising from vibrations of the well head.

**Response:** Typically there are only slight vibrations at the well heads of injection wells. The lack of any history of noticeable effects at other sites where injection is used suggests that any vibrations which do exist are not a problem.

27. **Comment:** The extraction of brine by the SPL facility would cause an extreme relaxation of pressure in the vicinity of the SPL wells which would cause a strong flow from the EDS facility toward the SPL facility causing additional degradation of the geological materials underpinning the area.

**Response:** This is a permitting action on SPL's Class I injection well. The extraction well permit decisions will be made by the MDEQ.

28. **Comment:** Withdrawal of brine from the Mt. Simon would eventually lead to withdrawal of hazardous waste previously injected by EDS with releases in the community.

**Response:** This is a permitting action on SPL's Class I injection well, not on the proposed extraction well. While we have considered the potential for impact on the SPL wells in requiring a waste analysis plan, this permit does not grant SPL permission to operate a production well. Production wells are regulated by the State.

29. **Comment:** Please review the effects of subsidence on surface facilities such as the airport and the interstate highway.

**Response:** This request was made because the commentor believed that extraction through a well proposed on the SPL site combined with injection of acidic wastes at the EDS site would cause dissolution in the injection zone and consequent collapse. This is a permitting action on SPL's Class I injection well. SPL's permitted injection will not cause subsidence.

30. **Comment:** EPA should consider the entire amount of toxic releases as presented in the Toxic Release Inventory (TRI) before issuing permits.

**Response:** As discussed in the response to Comment 2, above, EPA has considered the criteria set forth in the statute and regulations.

31. **Comment:** What was the well servicing equipment doing at the SPL facility a few weeks before the public hearing?

**Response:** A representative of SPL at the meeting explained a rig was there for regularly scheduled maintenance of an existing well.

32. **Comment:** Will there be additional traffic after the caverns are enlarged?

**Response:** There may be increased traffic.

33. **Comment:** Additional truck traffic would damage the interstate highway and the Michigan Department of Transportation should be consulted.

**Response:** As discussed in the response to Comment 2, above, EPA has considered the criteria set forth in the statute and regulations. This permit does not excuse compliance with requirements that might govern above-ground activities, including but not limited to any applicable permitting, zoning and/or manifesting requirements.

34. **Comment:** Where is the additional product coming from?

**Response:** The permit allows the injection of nonhazardous waste brine. As long as SPL complies with the permit and meets the criteria in the Statute and regulations, the source of the fuels to be stored in the cavern system is not relevant to the permit determination.

35. **Comment:** Concern was expressed about the effects of the contents of a pond near the site being pumped into a drainage ditch.

**Response:** This activity is not related to and will not affect the SPL injection well.

36. **Comment:** The EPA geologist is inconsistent because he stated at the public meeting on June 13 that the average injection rate would be 100 gpm and at the July 24<sup>th</sup> meeting he said it would be 400 gpm.

**Response:** The two different rates apply to different wells. The meeting on June 13<sup>th</sup> concentrated on the EDS operation. The injection rate which EDS used for its no migration petition was 100 gpm. The SPL permit hearing focused on the

operations of the SPL well. SPL is asking for, and the permit was drafted, with an average injection rate of 400 gpm included. This rate is not a limit, it is an estimate of the average injection rate. The injection by SPL will be controlled by a limit on injection pressure. The EPA was not inconsistent in this matter.

37. **Comment:** The EPA geologist at the hearing is inconsistent because he said that the operations of SPL and EDS are "incompatible" at one time, "essentially incompatible" at another time.

**Response:** While the geologist cited the possibility of compatible operations, he also noted that the costs involved might make them impracticable.

38. **Comment:** Part III of Michigan Act 451 prohibits construction in a wetland. Therefore, by issuing a construction permit, the MDEQ is failing to uphold the law. EPA should require MDEQ to enforce all environmental laws.

**Response:** Comments regarding the EDS wells will be addressed in the context of the EDS petition. The SPL injection well will not be constructed in a wetland. Moreover, as discussed above, issuance of this permit does not authorize any infringement of State or local law or regulations.

39. **Comment:** Many environmental projects, including this one, stretch the realm of the possible to the point that failure is likely should any upset occur.

**Response:** Injection of brine as authorized in this permit is not uncommon. This comment is too general to respond to. To the extent that it addresses the EDS petition, comments on those wells will be addressed in the context of the EDS petition.

40. **Comment:** One commentator thought that the injection zone would be a carbonate rock and that injection of acidic wastes by EDS with preferential flow toward the SPL well as a result of withdrawal would promote erosion of the acid-soluble rock resulting in eventual collapse which would threaten surface structures.

**Response:** This is a permitting action on SPL's Class I injection well. Comments on the no migration petition for the EDS wells will be addressed in the context of that petition. We have not made a determination on that petition at this time.

41. **Comment:** Injection of hazardous wastes by EDS will contaminate the natural brine in the Mt. Simon which is a potential source for many valuable products.

**Response:** Comments regarding the EDS wells will be addressed in the context of the EDS petition.

42. **Comment:** While earlier letters had suggested movement of wastes injected by EDS toward the deepest part of the basement which lies to the northwest, recent EPA statements indicated that the greatest amount of movement will be to the southeast.

**Response:** Comments regarding the EDS wells will be addressed in the context of the EDS petition.

43. **Comment:** The effects of the EDS well on the SPL operation would be more significant because the direction of flow of liquids in the subsurface is likely to be similar to the course of liquids on the surface. The Ecorse River flows from southwest to northeast.

**Response:** Comments regarding the EDS wells will be addressed in the context of the EDS petition. This permit requires SPL to monitor its fluids. Generally, flow direction on the surface is unrelated to flow in the deep subsurface.

44. **Comment:** Concern was expressed that the no migration demonstration is based on existing information, particularly information from the well which EDS drilled on Wahrman Road in 1992.

**Response:** Comments regarding the EDS wells will be addressed in the context of the EDS Petition.

45. **Comment:** The feasibility study which indicated that there are no significant structural features near the proposed site for EDS injection on Wahrman Road which could compromise the integrity of the injection zone is not valid for the EDS site on Citrin Road.

**Response:** Comments regarding the EDS wells will be addressed in the context of the EDS petition.

46. **Comment:** Concern was expressed about the differences cited by representatives of various regulatory agencies for the distances of horizontal migration from the EDS wells.

**Response:** Comments regarding the EDS wells will be addressed in the context of the EDS

petition.

47. **Comment:** The EPA will not limit EDS' injection rate to 100 gpm because EDS could not make money injecting at that rate.

**Response:** Comments regarding the EDS wells will be addressed in the context of the EDS petition.

48. **Comment:** The EPA should not permit the EDS facility because of the lack of need for waste disposal capacity based on waste produced in Michigan.

**Response:** Comments regarding the EDS wells will be addressed in the context of the EDS petition.

49. **Comment:** At 100 gpm EDS would inject 14,000 gallons a day.

**Response:** Comments regarding the EDS wells will be addressed in the context of the EDS petition.

50. **Comment:** During the June 13<sup>th</sup> public meeting the EPA geologist said that EDS would be able to inject anything regulated by RCRA while he says at the July 24<sup>th</sup> meeting that there will be all sorts of restrictions.

**Response:** Comments regarding the EDS wells will be addressed in the context of the EDS petition.

51. **Comment:** One commentator asserted that the need for a second well at the EDS facility demonstrates that wells cannot be constructed to be environmentally safe, because one reason for having two wells is that if there is only one well and it is being repaired, a second well is required to allow the business to serve its customers.

**Response:** Comments regarding the EDS wells will be addressed in the context of the EDS petition.

52. **Comment:** There are so many issues which might prevent EDS from drilling its wells that the EPA should wait until the other issues are resolved in order to avoid wasted

effort.

**Response:** Comments regarding the EDS wells will be addressed in the context of the EDS petition.

53. **Comment:** Concern was expressed that EDS would not have to include the SPL operation in its no migration demonstration.

**Response:** Comments regarding the EDS wells will be addressed in the context of the EDS petition. By letter dated September 28, 2001, EPA advised EDS of the potential impact of SPL operations on its demonstration.

54. **Comment:** Concern was expressed that the influence of the SPL extraction well would cause more of the acidic waste injected by EDS waste to flow to the northeast than in other directions, thereby undermining the interstate highway and other infrastructure.

**Response:** Comments regarding the EDS wells will be addressed in the context of the EDS petition. The SPL injection well we are permitting would not have this effect.

55. **Comment:** The operations envisioned by EDS and SPL are incompatible. EPA should prevent EDS from proceeding further because the EDS operation would interfere with SPL's ability to use what is clearly its own property.

**Response:** Comments regarding the EDS wells will be addressed in the context of the EDS petition.

56. **Comment:** The Site Review Board said that the Mt. Simon brine is more toxic than the chemicals which will be injected (by EDS) while the EPA says that the Mt. Simon is "Just a hard salt brine."

**Response:** Comments regarding the EDS wells will be addressed in the context of the EDS petition. While the nonhazardous waste brine that SPL will be injecting pursuant to this permit could be very concentrated, it must be injected pursuant to the requirements of the Class I permit we are issuing. Our determination focuses on whether the injection meets the standards in the statute and regulations and does not otherwise compare and contrast injectates.

57. **Comment:** EPA should look at the potential impact of the proposed EDS operation on the

proposed SPL wells.

**Response:** The proposed EDS wells, if allowed, should not impact the SPL injection well we are permitting. EPA is requiring SPL to monitor its fluids and has advised EDS to consider the SPL operations. Many of the comments submitted pertained to the proposed EDS hazardous waste injection wells. EDS has submitted a petition for a land ban exemption for those wells. EPA has not made a determination on the EDS petition and will address comments on those wells in the course of reviewing that petition.

### **Change**

The following change has been made to the permit:

1. Attachment F has been amended to add a requirement for monthly analyses of liquid from the extraction wells for hazardous constituents included in Appendix IX, 40 C.F.R. Part 264.

### **Appeal**

In accordance with 40 C.F.R. § 124.19, any person who filed comments on the draft permits or participated in the public hearing may petition the Environmental Appeals Board to review any condition of the final permit decision. Such a petition shall include a statement of the reasons supporting review of the decision, including a demonstration that the issue(s) being raised for review were raised during the public comment period (including the public hearing) to the extent required by these regulations. The petition should, when appropriate, show that the permit condition(s) being appealed are based upon either, (1) a finding of fact or conclusion of law which is clearly erroneous, or (2) an exercise of discretion or an important policy consideration which the Environmental Appeals Board should, in its discretion, review.

If you wish to request an administrative review, you must submit such a request either by regular mail to the U.S. Environmental Protection Agency, Clerk of the Board, Environmental Appeals Board (MC 1103B), Ariel Rios Building, 1200 Pennsylvania Avenue, N.W., Washington, D.C. 20460-0001 or your request may be delivered by express mail, a non U.S. Postal Service carrier, or hand carried to the Clerk of the Board at U.S. Environmental Protection Agency, Clerk of the Board, Environmental Appeals Board, 607 14th Street, N.W., Suite 500, Washington, D.C. 20005 between the hours of 8:30 a.m. and 4:30 p.m., Monday through Friday (excluding federal holidays).

Any envelope or other packaging containing documents sent to the EAB's mailing address or hand-delivery address, as prescribed above, should bear a complete and accurate return address in the upper left hand corner. The envelope or packaging should also clearly state the name of the permittee or facility and the permit number (UIC MI-163-11-0001) in the lower left hand corner.

The request must arrive at the Board's office on or before **April 1, 2002**. The request will be timely if received within this time period. For this request to be valid, it must conform to the



requirements of 40 C.F.R. § 124.19. A copy of these requirements is attached (Attachment C). This request for review must be made prior to seeking judicial review of any permit decision.

### **Final Permits**

The final permits are available for viewing at:

**Romulus Public Library**, 11121 Wayne Road, Romulus, Michigan 48174. Viewing hours are: Monday-Tuesday-Wednesday, 10 am - 8 pm, Thursday 10 am - 5 pm, and Saturday, noon - 5 pm.

**Taylor Community Library**, 12303 Pardee Road, Taylor, Michigan, 48180-4840. Viewing hours are: Monday - Thursday, 10 am - 8 pm, Friday - Saturday, 10 am - 5 pm, and Sunday 1 pm - 5 pm.

EPA's web site at [www.epa.gov/r5water/uic/uichot.htm](http://www.epa.gov/r5water/uic/uichot.htm).